METHOD AND APPARATUS FOR MEASURING AND ORIENTING GOLF CLUB SHAFT

Abstract of the Disclosure

[0155] The preferred orientation, or planar oscillation plane, of a golf club shaft is located by measuring the oscillation of the shaft when an impulse is applied. Preferably, the out-of-plane oscillation is measured at a large number of angular positions about the shaft axis, and the principal planar oscillation plane is identified by that pair of opposed angular positions in which the out-of-plane oscillation is smallest. The location of the preferred orientation may be marked on the shaft and used to assemble a golf club with the planar oscillation plane in a predetermined orientation. The straightness of the shaft can also be determined by deriving its spring constant from its oscillation frequency and then measuring the restoring force when the shaft is deflected by the same nominal amount at different angular positions; differences in restoring force can be attributed to differences in actual deflection distance resulting from lack of straightness.